

II. REMARKS

Preliminary Remarks

Upon entry of this Amendment, claims 1 to 4 and 8 to 13 will be pending, of which claim 1 is independent. Claims 1 to 4, and 8 are amended and claims 5 to 7 were previously canceled. Support for the claim amendments can be found in the specification and claims as originally filed (see, for example, page 1, lines 19 to 25 and page 5, lines 21 to 23). Therefore, the applicants believe that no new matter is introduced.

The examiner improperly withdrew claims 2 to 4 from consideration as being directed to a non-elected invention. The examiner's contention is that claims 2 to 4 fall outside the elected group because "(t)here is nothing in claims 2, 3 or 4 which would suggest that when R₇₀ is hydrogen, R₇₁ must be a substituent other than hydrogen, or that when R₇₁ is hydrogen, R₇₀ must be a substituent other than hydrogen." The applicants respectfully disagree.

First, under 35 U.S.C. §112, fourth paragraph, "(a) claim in dependent form shall be construed to incorporate by reference, all the limitations of the claim to which it refers." (emphasis added). Claim 1, clearly contains the proviso that "when R₇₁ is hydrogen, R₇₀ is not hydrogen". Therefore, the second part of the examiner's statement, namely, "(t)here is nothing in claims 2, 3 or 4 which would suggest that ... when R₇₁ is hydrogen, R₇₀ must be a substituent other than hydrogen" is incorrect. Second, regarding the first part of the examiner's statement, namely, "(t)here is nothing in claims 2, 3 or 4 which would suggest that when R₇₀ is hydrogen, R₇₁ must be a substituent other than hydrogen", the applicants point the examiner to the formal logical consequences of the aforementioned "if ... then" statement. For the convenience of the examiner, these are diagrammed below:

- if R₇₁ is hydrogen, then R₇₀ is not hydrogen – proviso as written;
- if R₇₁ is not hydrogen, then R₇₀ can be hydrogen (or, for example, an optionally substituted alkyl or acyl group) – one contra-positive of the proviso as written; and

- if R₇₀ is hydrogen, then R₇₀ cannot be hydrogen (*i.e.*, it has to be an optionally substituted alkyl or acyl group) – a second contra-positive of the proviso as written;

Logically, therefore, it is not possible for both R₇₁ and R₇₀ to be hydrogen. In other words, “when R₇₀ is hydrogen, R₇₁ must be a substituent other than hydrogen”. The examiner’s assertion that “(a) reasonable interpretation of claim 2-4 would be the possibility of R₇₀ and R₇₁ simultaneously representing hydrogen” is incorrect. Indeed, it would be an unreasonable, and illogical, interpretation.

Solely to advance prosecution, however, the applicants amend claims 2 to 4 to contain the proviso that when R₇₁ is hydrogen, R₇₀ is not hydrogen. For a second time, the applicants respectfully submit that since claims 2 to 4 are properly dependent from, and incorporate all the limitations of, claims 1, they are not drawn to non-elected subject matter and should be examined on the merits. The applicants herewith request such an examination.

The examiner did not consider references AI and AJ in Form PTO-1449 filed with the Information Disclosure Statement (IDS) of October 30, 2002. The applicants submit herewith a Supplemental IDS with Form PTO-1449, which contains the complete information for references AI and AJ. The applicants respectfully request that the examiner consider these references, sign the Form PTO-1449, and return the signed copy to the applicants.

This response is filed within the statutory period for response and is accompanied by a petition for a two-month extension of time and a check for the required fees. The applicants respectfully request reconsideration and allowance of the present application.

Patentability Remarks

Rejection under 35 U.S.C. §112 –

Claims 1 and 8 to 13 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite. The amendments to claim 1, in which the group “–CH₂C/C–” is replaced by the group “–CH₂C≡C–”, render this rejection moot. Therefore, the applicants respectfully request withdrawal of this rejection.

Rejections under 35 U.S.C. 102 –

Claim 1 is rejected under 35 U.S.C. §102(b) as being anticipated by Huang *et al.* (*J. Am. Chem. Soc.* **114**, 9390 - 9401, 1992). The applicants respectfully traverse in view of the preceding claim amendments and succeeding remarks.

As amended, claim 1 is directed to a compound where, *inter alia*, R₂ represents a hydrogen atom, an alkyl or benzoyl group or an alkyl group substituted with one or more halo, nitro, cyano, alkoxy, hydroxy, amino, alkylamino, sulphinyl, alkylsulphinyl, sulphonyl, alkylsulphonyl, amido, alkylamido, alkoxycarbonyl, haloalkoxycarbonyl or haloalkyl groups. The term “acyl group” is replaced by “benzoyl group” and the claim further recites specific substitutions of the alkyl group.

The applicants respectfully submit that with the replacement of “acyl” with “benzoyl” in claim 1, Huang *et al.* cannot anticipate claim 1. Therefore, the applicants request withdrawal of this rejection.

Claim 1 is rejected under 35 U.S.C. §102(b) as being anticipated by Talpir *et al.* (*Tetrahedron Lett.* **35(25)**, 4453 - 4456, 1994). The applicants respectfully traverse in view of the preceding claim amendments and succeeding remarks.

The examiner's rejection of claim 1 is based the position that the compound disclosed at the bottom of page 4456 of Talpir *et al.* anticipates claim 1, when Y is hydrogen and n is 1, 2, 3 or 4. Claim 1 clearly indicates, however, that Y is “an optional substituent”. Therefore, Y cannot be hydrogen, when n is 1, 2, 3 or 4, since a hydrogen atom is not a substituent on the phenyl portion of the indolyl group in formula I. In other words, when n is 1, 2, 3 or 4, none of the compounds of claim 1 is the compound disclosed at the bottom of page 4456.

The applicants respectfully submit that claim 1 cannot be anticipated by Talpir *et al.* and request withdrawal of this rejection.

Claim 1 is rejected under 35 U.S.C. §102(b) as being anticipated by O'Sullivan *et al.* (U.S. Pat. No. 5,081,225). The applicants respectfully traverse in view of the preceding claim amendments and succeeding remarks.

Solely in order to expedite prosecution claim 1 is amended to be directed to a compound where, *inter alia*, R₆ represents a hydrogen atom, an alkyl or benzoyl group

or an alkyl group substituted with one or more halo, nitro, cyano, alkoxy, hydroxy, amino, alkylamino, sulphinyl, alkylsulphinyl, sulphonyl, alkylsulphonyl, amido, alkylamido, alkoxycarbonyl, haloalkoxycarbonyl or haloalkyl groups. In other words, R₆ is not a substituted acyl or a substituted alkyl group as in O'Sullivan *et al.*

Furthermore, O'Sullivan *et al.* cannot anticipate claim 1 because R₆ and R₁₀ are clearly two separate groups in formula I of claim 1 (claim 1 does not recite that R₆ and R₁₀ can link together), so that R₆ and R₁₀ do not join together to form a cyclic peptide out of formula I. Therefore, the applicants request withdrawal of this rejection.

Claim 1 is rejected under 35 U.S.C. §102(b) as being anticipated by Minaev *et al.* ("Fluorescence Study of A-128-OP Antibiotic", CA 91:21053, 1977). The applicants respectfully traverse in view of the preceding claim amendments and succeeding remarks.

Minaev disclosed a cyclic peptide, antibiotic A-128-OP, containing dehydrotryptophan and methyltryptophan. This rejection appears to be based on the examiner's interpretation of claim 1 that R₆ and R₁₀ can link together. As indicated in the response to the rejection over O'Sullivan *et al.* (*supra*), this interpretation is incorrect. Minaev *et al.* also cannot anticipate claim 1 because neither R₂ nor R₆ can be a substituted alkyl or a substituted acyl group. Therefore, the rejection is improper and the applicants respectfully request its withdrawal.

Rejection under 35 U.S.C. 103 –

Claims 1, 8, and 10 to 12 were rejected under 35 U.S.C. §103(a) as being unpatentable over Talpir *et al.* The applicants respectfully traverse in view of the preceding claim amendments and succeeding remarks.

Claim 1 is amended to replace "acyl" with "benzoyl". The claim is also amended to exclude the methyl ester from the definition of R₇₅. Therefore, the applicants respectfully submit that claims 1, 8, and 10 to 12 are not unpatentable over Talpir *et al.* and request withdrawal of this rejection.

Claim 1 was rejected under 35 U.S.C. §103(a) as being unpatentable over Fromageot *et al.* (U.S. Pat. No. 5,356,794). The applicants respectfully traverse in view of the preceding claim amendments and succeeding remarks.

The examiner believes that Fromageot *et al.* disclose the peptide: KKKHW'VYYTCCPDTPYL, where W' represents dehydrotryptophan, and this peptide renders claim 1 obvious.

In amended claim 1, "acyl" is replaced with "benzoyl" and "substituted alkyl" is limited to an alkyl group substituted with one or more halo, nitro, cyano, alkoxy, hydroxy, amino, alkylamino, sulphinyl, alkylsulphinyl, sulphonyl, alkylsulphonyl, amido, alkylamido, alkoxycarbonyl, haloalkoxycarbonyl or haloalkyl groups. The applicants respectfully submit that amended claim 1 is not unpatentable over Fromageot *et al.* and request withdrawal of this rejection.

Claim 1 was rejected under 35 U.S.C. §103(a) as being unpatentable over Minaev *et al.* The applicants respectfully traverse in view of the preceding claim amendments and succeeding remarks.

This rejection appears to be based on a linear peptide generated from a cleavage of the ester bond in antibiotic A-128-OP of Minaev *et al.* The linear peptide, however, does not render claim 1 obvious as follows: (1) if the dehydrotryptophan in the linear peptide is treated as corresponding to the indolyl group of formula I of claim 1, the linear peptide falls outside of formula I because R₉ and R₁₀ do not form a cyclic amine with the nitrogen atom in -NR₉R₁₀; (2) if methyltryptophan in the linear peptide is treated as corresponding to the indolyl group of formula I of claim 1, the linear peptide falls outside of formula I because R₂ and R₆ in claim 1 no longer contains "acyl" (replaced by "benzoyl") and "substituted alkyl" (replaced by an alkyl group substituted with one or more non-peptide substituents).

The applicants respectfully submit that claim 1 is not unpatentable over Minaev *et al.* and request withdrawal of this rejection.

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Inventor(s): Andersen *et al.*
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III. CONCLUSION

In view of the amendments and remarks above, the applicants respectfully submit that this application is in condition for allowance and request favorable action thereon.

In the event this response is not timely filed, the applicants hereby petition for an appropriate extension of time. The fee for this extension, along with any other additional fees which may be required with respect to this response, may be charged to Deposit Account No. 01-2300, referencing Attorney Docket No. 108281-00001.

Respectfully submitted,

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